

ABSTRACT OF THE DISCLOSURE

A signal obtained by optically scanning a bar code is subjected to differentiation to obtain differential data. Peak-to-peak distances are calculated from the differential data. When a peak-to-peak ΔT_x distance is y times of a basic width, frequency $f(x,y)$ will be, $f(x,y)=y/\Delta T_x$. A frequency map is prepared from the frequencies calculated. Transition routes in which one frequency each is selected from each of the peak-to-peak distances, are formed. A transition route for which an error in frequencies is the least is taken as the most suitable transition route. An average of the frequencies included in the transition route is taken as a frequency f_0 of the basic width.